Speed Traps

Saving Lives or Raising Revenue?

Governments and police continue to target motorists with more speed cameras and tougher penalties despite the failure of 'speed kills' policies, reports **Alan Buckingham**

In a bid to reduce road injuries and fatalities the governments of many industrialised countries are increasing their focus on speeding motorists. No-one who drives on roads in New South Wales (NSW) or Victoria could fail to notice the growing stringency with which designated speed limits are being enforced through such things as speed cameras and double demerit points (DDP). In Britain, it is estimated that there are over 5,000 speed cameras in operation and in 2001 they were used to convict over one million motorists for speeding. By 2004 it is predicted that there will be up to three million convictions from 13,000 speed cameras.[1]

The British government justifies the anti-speeding measures on the grounds of reducing the number of serious and fatal accidents on British roads. Although Britain already enjoys the safest roads in the world per kilometre travelled,[2] the government has set the ambitious target of reducing the number of people killed or seriously injured in road accidents by 40% by 2010. To achieve this, speeding is being targeted because, according to the government, 'research has shown that speed is a major contributory factor in about one-third of all road accidents. This means that each year excessive and inappropriate speed helps to kill around 1,200 people and to injure over 100,000 more. This is far more than any other single contributor to casualties on our roads'.[3]

Similarly, in Australia many State governments consider speeding to be the most important factor contributing to serious accidents. Catching speeders has become a central plank of road safety policies.

Dr Alan Buckingham is a Senior Lecturer in Sociology at Bath Spa University College, England. The author is indebted to Paul Smith of Safe Speed (www.safespeed.org.uk) for much of the analysis on which this article is based, and Caspar Conde for the collection and analysis of Australian data.

Scientific evidence behind the oft-heard slogan 'Speed Kills' is flawed. Based on this flaky evidence draconian policies are being introduced that harm mostly safe drivers rather than dangerous drivers, because most safe drivers speed.

New South Wales, for example, introduced double demerit points in 1997 and followed this with the installation of speed cameras, which now total 110. Estimates of the revenue raised by speed cameras in NSW vary significantly—some put the figure at $40 million each year, others at over $100 million.[4] More recently, speed limits in some urban areas have been reduced from 40 kilometres per hour (km/h) to 30 km/h and from 1 November 2003 the State default urban speed limit will be reduced from 60 km/h to 50 km/h.

In Victoria the centrepiece of the government's five year 'Arrive Alive Road Safety Strategy' is a crackdown on speeding through a range of measures and new technologies including 40 km/h urban limits, 50 km/h rural township limits, point-to-point speed cameras and more fixed laser cameras. Currently, an estimated 42 fixed speed cameras are catching 65,000 speeding Melbourne motorists and reportedly raising $8 million a month.[5]

Setting lower speed limits and getting tough with speeders might be thought of as relatively uncontentious areas for government intervention, even for those who value personal liberty highly. Whereas the introduction of laws forcing drivers and passengers to wear seat belts or motorcyclists to wear crash helmets were fought by libertarians on the grounds that the only potential for harm is to one's self, the potential harm from excessive speed extends to others including passengers, other motorists and pedestrians. So why should we be concerned about government policy towards speeding?

The first reason is that the scientific evidence behind the oft-heard slogan 'Speed Kills' is flawed. The second is that based on this flaky evidence draconian policies are being introduced that harm mostly safe drivers rather than dangerous drivers, because most safe drivers speed. The third is that the policies bring a host of unintended consequences, the most worrying of which is that the downward trend in the number of serious and fatal injuries is faltering.

Does speed kill?

The basis for the British government's campaign against speeding is its claim that speed is a cause of one-third of accidents. This figure is based on research conducted by the government-funded Transport Research Laboratory (TRL), which collected data on police officers' reports on road accidents they attended.[6] However, it is highly misleading. To get the 30% figure the government categorised the following causes of accidents as speed related: 'excessive speed', 'failure to judge other person's path or speed', 'following too close', 'slippery road', 'in a hurry', 'aggressive driving', 'weather' and 'other'.

Only the very first category is unambiguously related to speed and this accounts for just 7.3% of accidents. All of the other causes are not primarily speed-related and the accidents may have nothing to do with speed. For example, 'failure to judge other person's path or speed' does not indicate whether the vehicle that was hit was speeding or travelling at an inappropriate speed. The cause is the failure of one driver to observe the behaviour of the other driver. Other causes, such as 'weather' and 'other', appear to have no obvious relationship to speed or speeding at all.

The proclivity of governments to add together a range of causes of accidents and label them 'speed-related' is not restricted to Britain. The Roads and Traffic Authority of NSW claims that 30% of fatal accidents involve speed. However, the category of 'speed' included 'trucks jack knifing', 'fatigue', 'alcohol' and 'speed excessive for the conditions'.[7]

Confusing the debate further is the way that 'speed', 'speeding' and 'excessive speed' tend to be used interchangeably. *Speed* is the term used most frequently in British TRL reports when examining correlates of accidents. But it is so broad that it could allow the authors to record any accident as 'speed-related' simply because speed is a factor in all collisions as objects cannot collide if they are not moving.

Excessive speed, on the other hand, is speed inappropriate for the conditions. It would apply,

for example, if a motorist were travelling at 50 km/h on black ice on a highway with a 110 km/h speed limit. This designation is subjective depending upon road condition, vehicle condition, driver abilities, and so on. One need not be speeding to be driving at an excessive speed: 'travelling too fast for the conditions is not the same as exceeding the speed limit'.[8]

Speeding generally refers to exceeding the posted speed limit, and bears no relationship to the current conditions. While all speeding implies speed, it does not necessarily imply excessive speed. Few would claim that driving 10 km/h above the speed limit on an empty motorway in good conditions constitutes driving with excessive speed.

The important point about this is that virtually all the research evidence on which policies are being made in Britain and Australia relates to 'speed' or 'excessive speed' rather than speeding. Yet it is speeders at whom the policies are being directed and it is speeders who are prosecuted.

Even if we were to accept that speed, excessive speed and speeding amount to the same thing, the evidence of the relationship between it and accidents is weak. The British Transport Research Laboratory (TRL) has long held the reputation for conducting some of the most sophisticated transport-related research in the world. Interestingly, not only did the TRL researchers find that just 7.3% of accidents were caused primarily by excessive speed,[9] when they examined speed on rural roads it was found that the *faster* the speed of the traffic the *fewer* accidents there were.[10] This is due, to a large extent, to the road quality with faster roads often being the 'highest quality' roads and therefore the safest ones. But this only suggests that safety policy should concentrate on improving the quality of roads by, for example, building more motorways rather than concentrating on 'speed'.

In fact, the TRL's research does suggest that once the quality of the road is controlled for, there is a positive correlation between accident rate and the speed of traffic.[11] So, on a given type of road the faster the average speed of the traffic, the more accidents there are. The researchers confidently make the prediction from their models that if the posted speed limit on 60 mile per hour roads in Britain was reduced by 10 miles per hour then an overall drop in average speed could be achieved and accidents could be reduced by 9%. The illusion created is that large numbers of motorists are travelling at or above the speed limit and that a speed reduction would slow these motorists down.

Their data, however, do not support this. They found only 5% of traffic to be speeding, with the average speed on these 60 mile per hour (mph) roads being 44 mph. On the most dangerous 60 mph roads the average speed was just 35 mph. Reducing the speed limit or using speed cameras on these roads is unlikely to have much of an effect because most motorists are already driving well below the speed limit.

Moreover, correlation does not imply causation. The 'finding' that speed positively correlates with accidents, once type of road is taken into account, fails to consider any prior variable that might both explain the speed *and* the accident. This means that the relationship between speed and accidents may well be spurious.

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Prior variables might include a range of poor driving behaviours and lack of experience, but rarely does research bother to include such variables. US research indicates that lack of correct timing and coordination is responsible for many accidents: '. . . the crucial element is often coordination. People need to do the right things at the right time in relation to what others are doing'.[12] Separating out driving at an excessive speed as a root cause in its own right is meaningless.

Too little speed and accidents

When we come to the analysis of the relationship between 'speeding' (rather than 'speed' or 'excessive speed') and accidents, the evidence in Britain and Australia is remarkably thin on the ground. Indeed,

US research on speeding has established that those who speed moderately tend to be the safest drivers. It is those who travel well *above* and well *below* the posted speed limit who are the biggest risk.

Most research agrees that it is those who drive at around the 85th percentile of the speed on a particular road who tend to be the safest drivers.[13] On British motorways for example, this equates to those who drive at about 85 mph or 15mph above the speed limit. Conversely, it is the *slowest* drivers who are the most risky drivers: 'The accident involvement rates on streets and highways in urban areas was highest for the slowest 5 percent of traffic, lowest for traffic in the 30 to 95 percentile range and increased for the fastest 5 percent of traffic.'[14]

An American 40 year-old, seat-belted, alcohol-free driver in a large car is less likely to be killed in 600 miles of interstate driving than on a journey of the same distance in a schedule airline.

The problem is that British speed cameras are often set to catch those who are travelling around 10 mph or more above the speed limit. This means that the law bears down heavily on the safest drivers who are travelling at about the 85th percentile of the traffic speed but above the speed at which the cameras operate, while some of the most dangerous drivers, who drive slowly, are not caught.

Fatal road accidents are very rare events

On motorways and on urban roads many of us speed yet speeding can rarely be a cause of serious or fatal accidents because data also show that there is just one death per 136 million km travelled in cars in Britain[15] and just one death per 109 million km travelled in Australia.[16] So, in Britain, given that the average person drives approximately 18,000 kilometres per year it would take 7,610 years of (frequently speeding) travel before the driver could expect to be involved in an accident resulting in his or her death. If, as the British TRL research shows,[17] 7.3% of accidents are caused by speeding then you would need to drive for over 100,000 years to die as a result of 'excessive speed'. Compared with this, staying in a British National Health Service hospital looks far riskier. The National Audit Office estimates that 5,000 people die every year from infections picked up during stays in hospitals due to lack of basic hygiene.[18]

Highlighting the inherent safety of road travel, the British Department of Trade and Industry has recently developed a 'Richter Scale for Risk', which lists a range of common situations in order of the chances of death. Of the six risk categories, ranging from 'High' to 'Negligible', the risk of dying in a car accident is in the fourth lowest category labelled 'Very low', together with such things as death from playing football or death from an accident at home.[19]

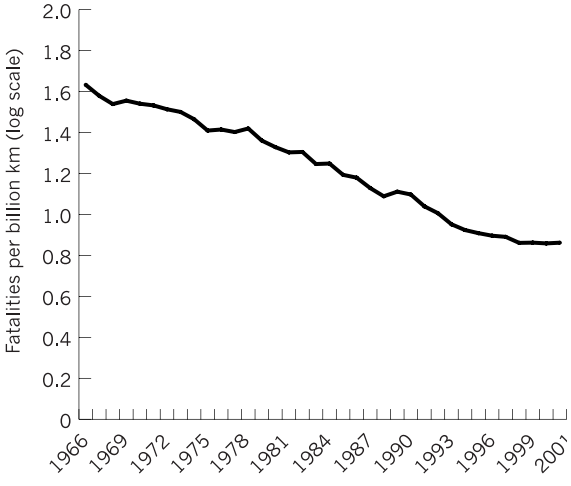
These data are averages. For older drivers the risks are much lower. Travelling by aeroplane is commonly thought of as being extremely safe and those who fear flying are sometimes regarded as irrational. Yet Leonard Evans calculates that an American 40 year-old, seat-belted, alcohol-free driver in a large car is less likely to be killed in 600 miles of interstate driving than on a journey of the same distance in a schedule airline. Note that in these calculations speeding is not controlled for: the motorist is free to speed as much as a typical American does and he or she is still safer than flying.[20]

The (in)effectiveness of speed cameras in saving lives

On the basis of shaky evidence of the relationship between 'speed', 'excessive speed', 'speeding' and accidents, Britain has witnessed an explosion in the number of speed cameras, from none in 1993 to over 5,000 in 2001. Some of these cameras catch in excess of 2,000 speeding motorists each day. The key justification for them is that speeds will be reduced and, since the research the government relies on indicates that speed correlates with accidents, the government hopes that the number of serious and fatal injuries will be reduced. Unfortunately, neither a reduction in speeds nor a marked reduction in serious and fatal accidents has been achieved. Office for National Statistics data show that in recent years average speeds have barely changed and, most worryingly of all, Department for Transport data show last year there was a decrease of just 0.5% in the number of fatalities on British roads.[21]

The whole point of speed cameras is to increase the rate of reduction in the number of serious and fatal accidents, but the data show the reverse. Figure 1 below shows the logged number of fatalities on British roads per billion kilometres travelled, and the recent trend paints a depressing picture.

Figure 1: Road Fatalities in Britain Per Billion Kilometres 1966-2001



Note: Logging the data is helpful when analysing trends since it shows consistent yearly decreases as a straight line and helps reveal deviations from it. *Source:* Department for Transport (DFT), *Transport Statistics Great Britain: 2002 Edition* (London: The Stationary Office, 2002).

From 1966 until 1993, the yearly drop in the fatality rate was fairly consistent with an average rate of decrease for this period of 3%. However, between 1993 and 2001 (the time period in which thousands of fixed speed cameras were installed) the trend line flattens somewhat, reflecting a slowing in the rate of drop in fatalities to 2.1%. Focussing on 1999-2001 (the period when speeding convictions rose by 44%) the trend line is nearly horizontal with an average yearly drop in fatalities of just 0.3%.

Something quite dramatic happened in 1993 to slow the decrease in fatal road accidents in Britain and eventually stall the decline altogether. One theory is that the implementation of the very first speed cameras and their subsequent proliferation is a causal factor. Certainly, there is a correlation. If the 1966-1993 trend line had continued until 2001 there would have been 825 fewer fatalities in that year than were actually recorded. If we correlate the increasing 'fatality gap' caused by the divergence between the 1966-1993 and 1993-2001 trend lines with the rise in speeding convictions by speed cameras since 1993 we obtain an almost perfect correlation of +.97. In other words, there is an almost perfect linear relationship between the increase in speed camera tickets and the increase in the fatality gap.

The pattern for Australia is quite similar with the sharp decreases in road deaths in earlier decades coming to an abrupt halt. Between 1980 and 1997 there was an average yearly decrease of 2.7% in road deaths, equating to a near halving of fatal crashes on Australian roads. Since 1997 the rate has slowed to just 0.7%.

When we examine States where speed cameras have been introduced the trends are even less encouraging. Figure 2 overleaf shows fatal crashes for three States that have introduced speed cameras. NSW and Victoria have both recorded an increase in the number of fatal crashes since the late 1990s while Western Australia shows a very erratic and slow decline since the 1980s.

Fatal crashes in NSW halved between 1980 and 1991, when speed cameras were introduced. Since then the decline has faltered, with a drop of just 3% since 1993 despite the implementation of double demerit points in 1997 and fixed speed cameras in 1999. Even less convincing is the case of Western Australia which has experienced a drop of 20% since speed cameras were introduced in 1988 compared with a fall of 40% over the same period for Australia as a whole.

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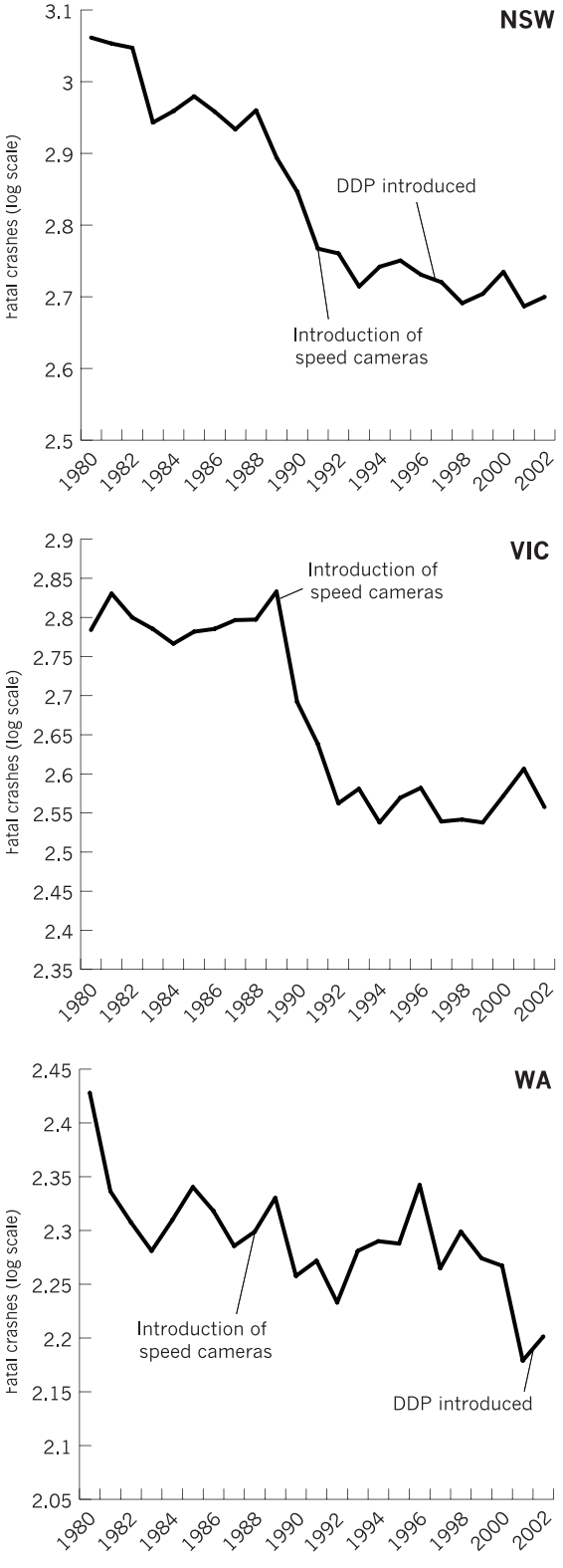
A more complicated case is that of Victoria. Here speed cameras were introduced in 1989 and, in the following three years, fatal crashes plummeted 46% compared with a fall of just 26% for NSW. Such a sharp fall immediately following the implementation of speed cameras led some to assume that the two are causally connected.[22] However, this assumption is questionable. The first problem is that for some inexplicable reason, the

Figure 2: Fatal Crashes in NSW, Victoria and Western Australia, 1980-2002



Sources: Australian Transport Safety Bureau (ATSB), *Road Fatalities Australia: Statistical Summary* (Canberra: ATSB, 2002); ATSB, *Road Fatalities Australia: Monthly Bulletin* (Canberra: ATSB, June 2003).

number of fatal crashes was anomalously high in the year prior to the implementation of speed cameras in Victoria. The subsequent fall gives a particularly positive impression of a dramatic decrease in deaths at the time when speed cameras were introduced. In other words, a key factor that explains the sharp decrease in fatal accidents between 1989 and the early 1990s is the increase in fatal accidents between 1988 and 1989. Speed cameras had nothing to do with this.

A second problem is that these data do not take into account how many kilometres Australians travel each year, for if the fatal road accidents drops at the same rate as the total number of kilometres travelled drops, the risk of being involved in a fatal accident would not have reduced at all. In fact, as a result of the recession in the early 1990s the number of kilometres travelled did drop suggesting that the drop in fatal crashes was partly caused by people using their cars less frequently rather than the roads becoming safer.

Using Australian Transport Safety Bureau data it can be calculated that once we factor in the number of kilometres travelled in each State for each year, relative to NSW (which did not implement speed cameras until 1999), the drop in the fatality rate in Victoria following the implementation of speed cameras in 1989 was no greater.[23] Victoria has always enjoyed slightly safer roads per kilometre travelled compared with NSW and the arrival of speed cameras in 1989 did nothing to increase that advantage.

Double demerit points

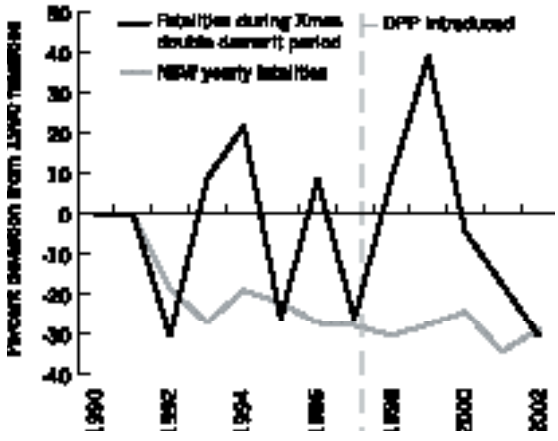
Is it too much to expect a large reduction in fatal road accidents from speed cameras given their scarcity and low density in Australia compared with, say, Britain? A larger effect might be expected from the NSW double demerit point (DDP) scheme with its stiff penalties for speeding (as well as other offences) acting as a powerful deterrent. Once again, however, despite claims made about the success of DDP in reducing accidents, the data do not support such an assumption.[24]

Figure 3 opposite shows the year-by-year deviation in fatalities from the number recorded in 1990 in NSW. If the line dips below the horizontal axis line then in that year fatalities were lower than in 1990 and if the trend line rises above the horizontal axis, fatalities were higher than in 1990. The grey

line shows fatalities for all 365 days of each year in NSW. Although we can see that in 2002 the number of fatalities was 30% lower than in 1990, virtually all of that fall occurred *before* the introduction of DDP.

The black line shows road fatalities in the Christmas period over which the DDP scheme now operates relative to the 1990 level. What is interesting about this line is that the introduction of DDP in 1997 did not lead to a sustained reduction in Christmas fatalities compared with previous years. Furthermore, if the DDP scheme were such a success then we would expect a sharper decline in fatalities during DDP periods than for the year taken as a whole. In fact, for the period 1997-2002 the drop in fatalities during the Christmas DDP period is almost exactly the same as that recorded for the complete year figures. Therefore, the verdict of the DDP scheme for the Christmas period must be 'no effect'.

Figure 3: Road Fatalities in NSW Relative to 1990 Comparing Yearly and Christmas Double Demerit Periods



Source: Derived from ATSB data, http://www.atsb.gov.au/road/

Unintended consequences

The failure of speed cameras to reduce serious road accidents is not a quirk of British or Australian data. Similar findings led the government of British Columbia in Canada to scrap their cameras. Data from the British Columbia Coroners Office on vehicle-related fatalities showed speed cameras did not save lives. A 2000 report, entitled *Safe Roads, Safe Communities*, stated that the programme had no discernible impact on speed or on the fatal accident rate. It also noted that most accidents happen at slower speeds, with two-thirds of all crashes occurring at speeds below the posted limit.

As for Britain, speed enforcement played no role in contributing to it having the safest roads in the world. Neither did the very rapid drop in road fatalities in Australia during the 1980s come about through speed cameras, DDPs or the associated speed policies. Furthermore, there is no evidence that speed cameras are playing a role today. In fact, there are a number of plausible reasons why speed cameras may cause *more* accidents:

- Speeds are slowed near camera sites so drivers divert to less safe routes in a bid to save time, or they may try to make up time by driving at inappropriate speeds where there are no cameras;
- Speeds are slowed and journey times are increased, leading some drivers to become frustrated or aggressive, and it forces all drivers to suffer longer exposure to accident risks;
- Lower speeds demand and, therefore, promote lower attention levels;
- Initiative to drive at the appropriate speed for the conditions shifts from the driver to speed cameras. Therefore, drivers will become less used to taking responsibility for adjusting speed according to complex, changing circumstances encountered;
- Drivers prioritise speed and speedometer watching over safe driving;
- Speed cameras distract the driver's attention as drivers look out for the next camera rather than the road ahead;
- Speed cameras cause sudden braking as drivers slow down to the posted speed limit.

There are other less obvious unintended consequences of the strict enforcement of speed limits. Those who drive outside the law with unregistered cars, cars on false registration plates or joy riders will be unaffected. Moreover, for those who previously drove within the law, there is an incentive to break the law by driving unregistered cars or cars with illegal number plates so that speed cameras cannot trace them.

Government pressure to reduce speed also leads police to prioritise enforcement of speed limits over other laws. This is supported by Department for

Motorists will notice that the mass conviction of speeders is being matched by a retreat from catching criminals. This risks alienating those on whose goodwill the police often rely.

Transport data for Britain which show that speeding convictions have risen by 229% between 1993 and 2000 while other driving related convictions, such as 'dangerous, careless or drunken driving', have dropped.[25]

Wider implications of speeding policies

One of the most worrying aspects of the onslaught on speeding motorists is the likely long-term effect it is having on the relationship between the police and motorists. If the current rate of increase in speeding convictions continues, 7.2 million motorists will be convicted in Britain by 2010. This averages out at one ticket each year for every three motorists. We have already seen that speeding is rarely a significant causal factor in accidents and serious accidents are extremely rare events. This means that millions of motorists are being convicted each year for a driving behaviour which is perfectly safe. It is likely that motorists will come to view the police's actions as cynical, vindictive and unfair.

The police's concentration on speeding cannot be explained by the fact that they have so few 'proper' criminals to catch since analysis of International Crime Survey data by Peter Saunders and Nicole Billante in the Summer 2002-03 issue of *Policy* shows that the UK, followed by Australia, has the highest crime rates out of 17 countries surveyed.[26] Instead, police behaviour can be seen as a rational reaction to their situation. In recent years the police have found it increasingly difficult to catch people for crimes, with a clear-up rate in England and Wales in 2002 of 18% for robbery and just 12% for burglary.

Furthermore, for many of the lesser crimes, where fines are imposed, payment levels are low. By turning attention to speeding motorists, the police can at last claim some success. Unlike the painstaking and often fruitless detective work involved in tracking down robbers and burglars, speed cameras catch speeders every time. There is also no paperwork involved since the procedure is automated. Finally, there is an economic incentive since law abiding speeders are more likely to pay than convicted criminals and, in England and Wales, the local police force is allowed to keep a proportion of speeding fines for itself.

The danger is that motorists will notice that the mass conviction of speeders is being matched by a retreat from catching criminals. This risks alienating those on whose goodwill the police often rely.[27] By regularly convicting large numbers of law abiding people, it is also possible that respect for the law will lessen in other areas.[28]

What can be done?

Given the evidence of the failure of speed cameras and the associated 'speed kills' policies, should we remove all speed cameras and all speed limits? This would be a mistake. Speed needs to be managed and sensibly enforced. Data show that those who travel at reckless speeds, usually well beyond the speed limit, are dangerous drivers. These drivers need to be caught and punished. Speed limits can also provide helpful guidance for inexperienced drivers who are unable effectively to use individual judgement about the appropriate speed. And speed cameras can play a role in deterring speeders at known 'black spots', where speeding can be shown to be an important factor in accidents.

Re-introduce police discretion to convict poor and dangerous drivers

The issue then is not whether speed should be managed but the place that speed policy should have in the overall context of road safety. Speed in itself does not kill, but inappropriate speed can kill. What causes inappropriate speed is part of a wider issue of poor driving. Poor drivers can be those who simply do not care about other road users, they can be the inattentive or they can be the inexperienced. Many of these drivers, just like safe drivers, may speed but they are also likely to behave in other ways that causes accidents.

Therefore the law and its enforcement should work against those who are a danger to others through poor driving rather than against motorists who break a numerical speed limit. Since speed cameras are unable to distinguish between poor

drivers and safe drivers, most speed cameras should be removed and a return made to tried and tested methods of law enforcement.

New laws or proper enforcement of current laws
If we are serious about road safety then it may be necessary to introduce new laws to make certain kinds of dangerous driving illegal or enforce more stringently laws that already exist. In some States in Australia tailgating (where a vehicle follows too close to the one in front) is illegal. This is rarely enforced and yet, according to a University of Adelaide study, rear-end collisions with the vehicle in front account for nearly 10% of all crashes. In Britain, there is no specific law for tailgating.[29]

Driver culture
Perhaps more important than laws, however, are conditions that enable drivers to take greater responsibility for their driving decisions. This is an issue of safety culture that cannot easily be enforced through law. What makes the roads in Britain the safest in the world is not that drivers travel slower there or that the roads are of a particularly high standard. Similarly, what gives Belgium a road fatality rate three times that of Australia cannot be explained by the speeds that Belgians travel at or the number of motoring laws that exist. The difference comes from driver culture.

The fundamental principle behind safe driving bodies such as the UK Advanced Drivers Association has always been taking responsibility by driving within the capabilities of oneself, the car and the environment. This involves anticipating events, not exceeding safety margins and leaving room for error. The current situation where drivers feel safe or blameless as long as they keep within the speed limit runs counter to this principle. Driving culture comes through evolved norms about good and bad driving. This can be achieved partly through better education and training but it cannot be created through more cameras, fines or double demerit points.

Why the obsession with speed?

While some countries have recently increased speed limits on major roads (for example, Italy and some States in the US), in Britain and Australia there is strong pressure to reduce speeds and catch speeders. The British government has said that it wants to make speeding as socially unacceptable as drink driving yet, unlike the risks associated with drink driving, the data are not there to support the claim that speeding causes accidents.

It is true that the faster the impact speed the greater the risk of injury or death, but it does not follow that speeding leads to more accidents. Nevertheless, millions of mainly law-abiding people are being convicted each year. Moreover, to the extent that the risk of a serious accident has come down over the last 40 years, it is due to careful road engineering, sensible law enforcement, medical advances and massive advances in car safety, not speed cameras.

As the failure of the 'speed kills' policy becomes clear, the reaction of the government and police is not to review the obsession with speeding but to think of more ways of catching more speeders and imposing tougher penalties.

As the failure of the 'speed kills' policy becomes clear, the reaction of the government and police is not to review the obsession with speeding but to think of more ways of catching more speeders and imposing tougher penalties. Large sums of money are being spent on new, high technology equipment that photographs drivers as well as the car number plate. The British government is currently investigating GPS technology which offers the ability to control electronically the maximum speed of a vehicle according to the prevailing speed limit.

The issue of speeding highlights the familiar story of failed state intervention: the government intervenes to improve the well-being of some group of people (be it the poor, lone parents or road accident victims). Simplistic theories of causation are assumed about how the improvement can be achieved. Policies are applied without respect for the likely unintended consequences and, over time, evidence emerges to

suggest that the policies are not working. Far from faith in the original policies being dented, it is seen as evidence that more extreme policies are needed to bring about significant change.

The net result of years of speed cameras in Britain and Australia is that road speeds have not slowed significantly, the downward trend in serious accidents and fatalities has been almost totally lost, hundreds of thousands of the safest drivers are convicted each year and the goodwill between law abiding citizens and the police is evaporating. In the midst of all this, British and Australian State governments are selling their speed campaigns as a great success. Don't believe it.

Endnotes

1 *The Sunday Time*s, 'One Million Drivers a Year Convicted by Speed Cameras' (1 September 2002).

2 Department for Transport (DFT), *Transport Statistics Great Britain: 2001 Edition* (London: The Stationary Office, 2001).

3 Department for Transport (DFT), *Tomorrow's Roads: Safer for Everyone. The Government's Road Safety Strategy and Casualty Reduction Targets for 2010 (*London: The Stationary Office, 2000), p.38.

4 Over $80 million was raised from 891,000 speed camera infringement notices in 2001-2002 (*NSW Police Annual Report 2001-2002*, p.60) while a NSW Auditor General's report put revenue from speed cameras at over $141 million in 2000-2001 (NSWAG, *Report to Parliament 2001*, vol.7 at 512).

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17 TRL, 1998 (see n.6).

18 National Audit Office, *The Challenge of Hospital Acquired Infection* (London: The Stationary Office, 2000).

19 J. Adams, *Risky Business* (London: Adam Smith Institute, 1999).

20 L. Evans, *Traffic Safety and the Driver* (New York: Van Nostrand Rheinhold, 1991).

21 Office for National Statistics (ONS), 'Vehicle Speeds in Great Britain 2002', *Statistics Bulletin* (02) 21, 2002; Department for Transport (DFT), *Road Casualties in Great Britain. Main Results: 2002* (London: The Stationary Office, 2003).

22 For example, the Honourable Jackie Pement, addressing the Legislature of British Columbia, June 13, 1995 claimed: 'Over four years cameras [in the State of Victoria, Australia] contributed to a 46 percent reduction in fatalities, and a 36 percent reduction in injuries. Those are pretty significant stats'. Hansard, *Official Report of the Legislative Assembly* (Tuesday, 13 June 1995), p.15452, http://www.legis.gov.bc.ca/1995/hansard/h0613pm2.htm

23 Australian Transport Safety Bureau (ATSB), *Road Fatalities Australia: Statistical Summary* (Canberra: ATSB, 2002).

24 See, for example, the claims made by the Roads and Traffic Authority of NSW, http://www.rta.nsw.gov.au/rulesregulations/penalties/demeritpoints/

25 For example, the data also show that over the same period convictions for 'Neglect of traffic signs and directions and pedestrian rights' dropped by 8%, convictions for 'Dangerous, careless or drunken driving etc.' dropped by 25% and convictions for 'Accident offences' dropped by 33 per cent. DFT, 2002 (see n.21).

26 P. Saunders and N. Billante, 'Does Prison Work?', *Policy* 18:4 (Summer 2002-2003), pp.3-8.

27 Writing on the introduction of speed cameras in Britain Corbett argues, 'It is possible that present "contentment" could evaporate, to be replaced by alienation of the average driver, which is something that both police and government would wish to avoid'. C. Corbett, 'Road Traffic Offending and the Introduction of Speed Cameras in England: The First Self-Report Survey.' *Accident Analysis and Prevention* 27:3 (1995), p.353.

28 As a report on the attitudes of British Columbia motorists demonstrates, 'Our findings could indicate that radar cameras have the potential for an opposite effect from reduced speeding. Moreover, the sum total of the resistance to the perceived unfairness of this enforcement may be generalized to other forms of law enforcement'. Insurance Corporation of British Columbia (ICBC), Traffic Safety Research Department, *Public Attitudes Towards the Use of Automatic Cameras for Enforcement of Traffic Law Infractions* (Vancouver: ICBC, 1990).

29 C. Kloeden, A. McLean, V. Moore, and G. Ponte, 'Travelling Speed and the Risk of Crash Involvement', NHMRC Road Accident Research Unit (The University of Adelaide, November 1997).